

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-11 are now present in the application. Claims 1, 2, 4, 5, 7, 8, 10 and 11 have been amended. Claims 1 and 7 are independent. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Citation

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statement filed on June 8, 2005, and for providing Applicants with an initialed copy of the PTO-1449 form filed therewith.

Drawings

Applicants thank the Examiner for accepting the formal drawings of the instant application.

Claim Rejections Under 35 U.S.C. §§ 102 & 103

Claims 1 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Tomotake, JP 11-189,999. Claims 1, 6 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yokoya, U.S. Patent No. 6,019,170. Claims 2, 3, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tomotake. Claims 4, 5, 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tomotake in view of Takao, U.S. Patent No. 3,982,981. Claims 2, 3, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable

over Yokoya. Claims 4, 5, 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yokoya in view of Takao. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

In light of the foregoing amendments, Applicants respectfully submit that these rejections have been obviated and/or rendered moot. Without conceding to the propriety of the Examiner's rejections, but merely to timely advance the prosecution of the application, as the Examiner will note, independent claims 1 and 7 have been amended.

Independent claim 1 now recites a combination of elements including "the heat exchange plates are made of a paper material with fiber intensity and with a plurality of fine holes that are able to generate a capillary action, moisture of one of the indoor air in the first air passage and the outdoor air in the second air passage being absorbed by the plurality of fine holes due to the capillary action and being directly transferred from the plurality of fine holes to the other one of the indoor air in the first air passage and the outdoor air in the second air passage."

Independent claim 7 now recites a combination of elements including "the heat exchange plates, the first corrugation plates and the second corrugation plates are made of a paper material with fiber intensity and with a plurality of fine holes that are able to generate a capillary action, moisture of one of the indoor air in the first air passage and the outdoor air in the second air passage being absorbed by the plurality of fine holes due to the capillary action and being directly transferred from the plurality of fine holes to the other one of the indoor air in the first air passage and the outdoor air in the second air passage."

Support for the above combinations of elements can be found at least in the paragraphs respectively beginning on page 5, line 15, on page 11, line 9, and on page 11, line 15.

Applicants respectfully submit that the combinations of elements set forth in claim 1 and 7 are not disclosed or suggested by the references relied on by the Examiner.

Tomotake discloses a whole heat exchanger paper coated with a moisture absorbing/releasing powder (see Abstract and paragraph 0011). In other words, the moisture is absorbed by the moisture absorbing/releasing powder, not “absorbed by the plurality of fine holes due to the capillary action” as recited in amended claims 1 and 7. In fact, Tomotake nowhere discloses using the capillary action to absorb the moisture.

In addition, since the moisture is absorbed by the moisture absorbing/releasing powder and released by the same moisture absorbing/releasing powder, Tomotake fails to teach “moisture of one of the indoor air in the first air passage and the outdoor air in the second air passage being directly transferred from the plurality of fine holes to the other one of the indoor air in the first air passage and the outdoor air in the second air passage” as recited in amended claims 1 and 7.

Yokoya discloses a partition 2/13 of the total heat exchanger, consisting of a porous material 11 and a thin film 12 having a moisture permeability (see FIG. 5, col. 10, lines 40-42.) Yokoya further discloses that the porous material 11 is a porous nonfibrous sheet (see col. 10, lines 42-46.) Yokoya also discloses that the thin film 12 is a water-insoluble hydrophilic polymer such as a polyurethane resin containing an oxyethylene group, a polyester resin containing an oxyethylene group, or a resin material containing a sulfonic acid group, an amino group or carboxyl group at the terminal or side chain (see col. 10, lines 47-52.) Therefore, neither the porous material 11 nor the thin film 12 is a paper material with fiber intensity. Accordingly, Yokoya fails to teach “the heat exchange plates are made of a paper material with

fiber intensity” as recited in amended claim 1 and “the heat exchange plates, the first corrugation plates and the second corrugation plates are made of a paper material with fiber intensity” as recited in amended claim 7.

With regard to the Examiner’s reliance on Takao, this reference has only been relied on for its teachings related to some dependent claims. This reference also fails to disclose the above combinations of elements as set forth in amended independent claims 1 and 7. Accordingly, this reference fails to cure the deficiencies of Tomotake and Yokoya.

Accordingly, none of the utilized references individually or in combination teach or suggest the limitations of amended independent claims 1 and 7. Therefore, Applicants respectfully submit that amended independent claims 1 and 7 clearly define over the teachings of the utilized references.

In addition, claims 2-6 and 8-11 depend, either directly or indirectly, from independent claims 1 and 7, and are therefore allowable based on their respective dependence from independent claims 1 and 7, which are believed to be allowable.

In view of the above remarks, Applicants respectfully submit that claims 1-11 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 & 103 are respectfully requested.

Additional Cited References

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the state of the art, no further comments are necessary with respect thereto.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: July 14, 2006

Respectfully submitted,

By 

James T. Eller, Jr.

Registration No.: 39,538

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

